Response to Report Comments

Project:

Santospirito Torquay Dam

Revision:

Date: Reviewers:

Responder: Amir Farazmand (AGT)

	Peer Review				Consultant Response			Comment on response		
ltem	ltem	Comment Date	Peer Review Comment	Responder's Name	Response/Action for Resolution	Date	Comment	Date	Closed (Y/N)	
1	15-a-3	12-Aug-21	Measurements of depth of the dam below water level	Amir	The depth is estimated based on the historical dam drawing indicating 3m excavation into natural ground	09-Aug-21				
2	15-a-4	12-Aug-21	Measured groundwater levels in the standpipe piezometers since they were installed.	Amir	Link to OneDrive folder provided includes also daily inspection sheet (reduced intervals after first 6 months to weekly)	30-Jan-21				
3	15-b-2	12-Aug-21	elevation of "sump pipe" relative to		Elevation to be surveyed.					
4	15-b-3	12-Aug-21	pipe material and diameter of the		PVC pipe 150mm					
5	15-b-4	12-Aug-21	internal condition of "sump pipe"		This pipe is currently blocked at both ends and not visible					
6	15-b-5	12-Aug-21	Any other old or disused pipes		No other pipes was observed during two visits and confirmed by the client.					
7	15-c-1	12-Aug-21	basis for selecting the reduced Full		Based on the results of Dam break model and as agreed with the SRW engineers					
8	15-c-2	12-Aug-21	hydraulic calculations to determine the proposed pipe diameter		Spreadsheet provided, please note the dam has no natural catchment and spillway is only to cope with pumped water of 25 Lit/sec					
9	15-c-3	12-Aug-21	consideration given to potential		Carry out inspection of the pipe prior to starting the pump. If the start is automated, provide a low point					
10	15-c-4	12-Aug-21	method of drilling proposed and the		Only auger drilling has been or will be undertaken. There is no rock in the foundation requiring air or					
11	15-c-5	12-Aug-21	mitigate the potential for internal		The standpipe is installed above the reservoir level and therefore no seepage is expected unless for					
12	15-d-1-a	12-Aug-21	output plots for the EL 12 metres		Output and Hec-Ras Model are provided.					
13	15-d-1-b	12-Aug-21	HEC-RAS model output files		Results are provided now for RL14, and RL12 with two breach cases (in 20min and in 1min).					
14	15-d-2-a	12-Aug-21	breach modelling for the EL 12 if the		This is modelled for RL12 breach case for the breach occurs in the southwest coroner behind Pintail					
15	15-d-2-b		details of the sensitivity of the		3 cases of breach modelling are currently carried out for RL14 and RL12 and the results seem to be					
16	15-d-2-c	12-Aug-21	details of the number of properties		The dam break model shows the extent of the properties being flooded for the RL14 report. These are					
17	15-d-2-d	12-Aug-21	Predicted depth and velocity of		The output is provided for various times after the breach.					
18	15-e-1	U	level of risk for the EL 12 metres		The dam break model shows the risk is significantly low with the flood level for the area being mostly					
19	15-e-2	12-Aug-21	historic performance method for		In addition to historic performance Emerson class test is carried out to assess the piping potential.					
20	15-e-3	12-Aug-21	further details about the risk assessment (currently only quantifies piping failure)		"Dam Safety Review Report No: AGTE20249-3 Rev1" and also "AGTE17463 The Dunes Torquay - 1075 Horseshoe Bend Road, Torquay" include piping, flooding, slope stability and liquefaction risks. Nevertheless, considering the type of the dam and its geometry, piping is the main risk to be considered as the other risks even though assessed are significantly low.					
21	15-e-4	12-Aug-21	Basis for the estimated potential life		Various methods such as USBR and UNICIV reports (University of NSW) was considered for estimating					
22	15-e-5	12-Aug-21	Risk assessment (Section 9 .2.2,		As part of the risk assessment for the dam the societal risk can be assessed and communicated with					
23	15-e-6	12-Aug-21	Consequence Category for the dam		This is now carried out for RL12. We believe the new hazard category is "Significant".					
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Supplied Docur	mentation	Author		
<u>Ref No.</u>	Title		Date	
AGTE20249	The Dunes Dam Torquay	AGT	09-Oct-20	
AGTE20249 -1	The Dunes Dam Torquay	AGT	21-Oct-20	
AGTE20249 -2	DSEP Torquay Farm Dam	AGT	30-Nov-20	
AGTE20249 -3	Torquay Farm Dam Safety Review	AGT	27-Nov-20	
AGTE20249 -4	Torquay Farm Dam - Dam Break	AGT	26-Nov-20	
AGTE20249 -3	AGTE20249-3 Torquay Farm Dam	AGT	30-Jan-21	
AGT20249-2	DSEP Simplified AGTE20249-2	AGT	09-Jul-21	